

GALTO C287T mutation in the 1B-D1606 strain may be responsible for the Gal- phenotype (A) SNVs in the GAL locus compared to S288C. Upper character, reference nucleotide; lower character, variant nucleotide. Nucleotides of the Watson strand are indicated. C287T substitution

in GAL10 of 1B is highlighted in blue circle. (B) The complete GAL locus or its GAL10-containing fragment but not GAL1 alone compensates

for 1B inability to grow on galactose-containing medium. 1B was transformed with multicopy plasmids containing the complete GAL locus (GAL7+GAL10+GAL1) or its fragments containing either only GAL1 or GAL7+GAL10. Shown are series of 10-fold dilutions spotted on synthetic media lacking leucine with glucose or galactose/raffinose as a carbon source. Vector, YEp351. (C) Alignment of conservative part of UDP-galactose-4-epimerase homologs (Gal10 from S. cerevisiae S288C and 1B strains and GalE proteins from other species). In blue frame, Ala96Val substitution in 1B. In red frame, 94Val in human GALE.